B1

SEQUENCE LISTING

<110> Thompson, James D.

<120> IMPROVED POLYMERASE III-BASED EXPRESSION OF THERAPEUTIC RNAS

<130> MBHB00-919-D

<140> 09/630,846
<141> 2000-08-02

<150> 08/512,861
<151> 1995-08-07

<150> 08/293,520
<151> 1994-08-19

<150> 08/337,608
<151> 1994-11-10

<160> 22

<170> PatentIn Ver. 2.0

<210> 1
<211> 88
<212> RNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (83)
<223> n represents ribothymidine.

<220>
<221> misc_feature
<222> (86)..(88)
<223> all n's represent ribothymidine.

<400> 1
ggcagaacag cagaguggcg cagcggaagc gugcugggcc cauaacccag aggucgaugg 60
aucgaaacca uccucugcua ggnccnnn 88

<210> 2
<211> 70
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: a truncated
version of tRNA.

<400> 2
ggcagaacca gcagaguggc gcagcggaag cgugcugggc ccauaaccca gaggucgaug 60
gaucgaaacc 70

<210> 3
<211> 108
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: S35 tRNA
Chimera (S35).

<400> 3
ggcagaacag cagaguggcg cagcggaagc gugcugggcc cauaacccag aggucgaugg 60
aucgaaaccc cggaucguac cgcggggauc cacucugcug uucuguuu 108

<210> 4
<211> 146
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: S35 Ribozyme
Chimera (HHIS35).

<400> 4
ggcagaacag cagaguggcg cagcggaagc gugcugggcc cauaacccag aggucgaugg 60
aucgaaaccc cggaucguac cgcggcacaa cacugaugag gaccgaaagg uccgaaacgg 120
gcaggaucca cucugcuguu cuguuu 146

<210> 5
<211> 133
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: S35 Plus tRNA
Chimera (S35 Plus).

<400> 5
ggcagaacag cagaguggcg cagcggaagc gugcugggcc cauaacccag aggucgaugg 60
aucgaaaccc cggaucguac cgcggggauc cuaacgaucc gggugucga uccaucacuc 120

ugcuguucug uuu

<210> 6
<211> 171
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: S35 Plus
Ribozyme Chimera (HHIS35 Plus).

<400> 6
ggcagaacag cagaguggcg cagcggaagc gugcugggcc cauaacccag aggucgaugg 60
aucgaaaccc cggaucguac cgcggcacaa cacugaugag gaccgaaagg uccgaaacgg 120
gcaggauccu aacgauccgg ggugucgauc caucacucug cuguucuguu u 171

<210> 7
<211> 11
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: A BOX
consensus sequence.

<220>
<221> misc_feature
<222> (5)..(6)
<223> each n represents any one of a, c, g, or u.

<400> 7
urgcnnagyg g 11

<210> 8
<211> 11
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: B BOX
consensus sequence.

<220>
<221> misc_feature
<222> (8)
<223> n represents any one of a, c, g, or u.

<400> 8

gguucganuc c 11

<210> 9
<211> 129
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: 5T tRNA
Chimera (5T).

<400> 9
ggcagaacag cagaguggcg cagcggaagc gugcugggcc cauaacccag aggucgaugg 60
aucgaaacca uccucugcug uucugccgcg gcgaaagccg caaacacaca aaaaccccca 120
aaccccuuu 129

<210> 10
<211> 167
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: 5T Ribozyme
Chimera (HHI5T).

<400> 10
ggcagaacag cagaguggcg cagcggaagc gugcugggcc cauaacccag aggucgaugg 60
aucgaaacca uccucugcug uucugccgcg gcgaaagccg caaacacaac acugaugagg 120
accgaaaggu ccgaaacggg cacacacaaa aacggcgaaa gccguuu 167

<210> 11
<211> 112
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TRZ-A tRNA
Chimera.

<400> 11
ggcagaacag ucgaguggcg cagcggaagc gugcugggcc cauaacccag aggucgaugg 60
aucgaacacu gcgccacucc ugaugagccg caaaggcgau acuguucugu uu 112

<210> 12
<211> 112
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TRZ-B tRNA
Chimera.

<400> 12
ggcagaacag ucgaguggcg cagcggaagc gugcugggcc caraacccag aggucgaugg 60
aucgaacacu gcgccacuca aaaaaagccg caaaggcgau acuguucugu uu 112

<210> 13
<211> 148
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HHITRZ-A
Ribozyme Chimera.

<400> 13
ggcagaacag ucgaguggcg cagcggaagc gugcugggcc cauaacccag aggucgaugg 60
aucgaacacu gcgccacucc ugaugagccg cacacaacac ugaugagccg aaaggcgaaa 120
cgggcacaca ggcgauacug uucuguuu 148

<210> 14
<211> 169
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HPITRZ-A
Ribozyme Chimera.

<400> 14
ggcagaacag ucgaguggcg cagcggaagc gugcuugggc ccauaaccca gaggucgaug 60
gaucgaacac ugcgccacuc cugaugagcc gcacacaaca agaaggcaca accagagaaa 120
cacaggcgaa agccugguac auuaccuggu aggcgauacu guucuguuu 169

<210> 15
<211> 64
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: a U6-S35
chimera.

<220>
<221> unsure
<222> (1)..(64)

<223> all n's represent ribothymidine.

<400> 15
gggcacncga anncaagcac aaacaaaaan aaaccaccaa acaaagcnng agnncgagng 60
nnnn 64

<210> 16
<211> 104
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: a U6-S35
ribozyme chimera containing a hammerhead ribozyme
targeted to site I (HHI).

<220>
<221> unsure
<222> (1)..(104)
<223> all n's represent ribothymidine.

<400> 16
gggcacncga anncaagcac aaacaaaaaa cacaacacng angagccgaa aggcgaaacg 60
ggcacacana aaaccaccaa acaaagcnng agnncgagng nnnn 104

<210> 17
<211> 102
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: a
U6-S35-ribozyme chimera containing a hammerhead
ribozyme targeted to site II (HHII).

<400> 17
gggcacucga auucaagcac aaacacaaca auuucuuccu gaugagccga aaggcgaaaa 60
aaccgaacca cacaacaaac aaagcuugag uucgaguguu uu 102

<210> 18
<211> 161
<212> RNA
<213> Adenovirus VA1 RNA.

<400> 18
uuucccgggc acucuuccgu ggucuggugg auaaauucgc aaggguauca uggcggacga 60
ccgggguucg aacccggau cccggccguc cgccgugauc caugcgguua ccgcccgcgu 120
gucgaaccca ggugugcgac gucagacaac gggggagcgc u 161

<210> 19
<211> 175
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: VA1-S35
Chimera.

<400> 19
gggcacucuu ccguggucug guagauaaau ucgcaagggu aucauggcgg acgaccgggg 60
uucgaacccc ggauccggcc guccgccgug auccaugcgg uuaccgcgaa uucaagcgaa 120
agcuugaauu cgcgguaacc caggugugcg agcucagaca acgggggagu guuuu 175

<210> 20
<211> 72
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: VA1 Chimera.

<400> 20
gggcaccucu uccguggucu gguagauuaa auucgcaagg guaucauggc ggacgaccgg 60
gguucgaacc cc 72

<210> 21
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide encoding the S35 insert.

<400> 21
gatccactct gctgttctgt ttttga 26

<210> 22
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide encoding the S35 insert.

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<400> 22

cgcgtcaaaa acagaacagc agagtg 26